REMARKS

Upon receipt of the Advisory Action and consideration of the points raised by the Examiner therein, applicants are formally presenting the same claim amendments with additional remarks setting forth the legal and technical reasons as to why the amendments are proper in all respects and why the claims are patentable over the cited prior art.

By the present Amendment, claim 1 has been revised to recite that the at least one other salt of zinc is selected from zinc phosphate, zinc stannate and calcium zinc molybdate and to recite the mass ratios of these salts relative to zinc borate. In this latter regard, claim 1 now recites that when the other salt of zinc is zinc phosphate, the mass ratio of zinc borate and zinc phosphate is 1:0.1 to 1:5, and when the other salt of zinc is zinc stannate or calcium zinc molybdate, the mass ratio of zinc borate and zinc stannate or calcium zinc molybdate is 1:1. Support for these recitations may be found in the specification at least at page 13, line 21 to page 14, line 24 and Examples 1-7, with Examples 5 and 6 illustrating a 1:1 mass ratio of zinc borate and zinc stannate and zinc borate and calcium zinc molybdate, respectively. New dependent claim 15 has been added to recite more preferred amounts of the inorganic reinforcing agent and the drip preventing agent as described in the specification such as on page 16, lines 15-21 and page 17, lines 14-20, respectively. Claims 2, 3 and 9-14 have been canceled without prejudice or disclaimer.

On page 2 of the Advisory Action, the Examiner appears to contend that Examples 5 and 6, which clearly show a 1:1 mass ratio of zinc borate to zinc stannate or calcium zinc molybdate, is insufficient because the examples are not commensurate in scope with the claims .

Applicant respectfully submits that the Examiner has applied the wrong standard of the written description requirement under the first paragraph of 35 U.S.C. §112. The correct standard, as set forth decisions such as *In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983), is whether the disclosure of the application "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." That requirement is clearly met here with the aforementioned Examples expressly showing the claimed mass ratio. This understanding is supported by a number of decisions which relate to the descriptive support provided by examples in the specification. For instance, in *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570, 227 USPQ 177 (Fed. Cir. 1985), a number of claim recitations were contested as failing to find descriptive support in the grandparent application. Some of the recitations involved a temperature range with various claims reciting "in excess of 212°F", "at least about 212°F", "substantially above 212°F", "substantially in excess of 212°F", and "into the range of 212°F - 310°F". The grandparent application described that the mixture "must be subjected to heat" and Example 1 set forth a range of 212°-380°F. Both the trial court as well as the Federal Circuit found that each of these quoted recitations was supported by the grandparent application including Example 1. Similarly, in *In re Wertheim*, 541 F2d 257, 191 USPQ 90 (CCPA 1976), the court found that the recitation of a solids content range of "between 35% and 60%" was supported by a disclosure of 25 to 60% solids and examples of 36% and 50%. Thus, applicant respectfully maintains that the amended claims find full descriptive support in the specification.

Turning to the issues of patentability of the claims over the cited prior art, applicant again notes that in accordance with the present invention, one can obtain a

flame-retardant composition which generates little or no bromine gas, has excellent flame retardancy, toughness and melt fluidity, as well as good heat resistance and color stability in the reflow soldering step required in surface mounting technology. Such advantageous results are illustrated in Examples 1-7 in Table 1 on pages 28 and 29 of the specification, which include each of the recited combinations of zinc borate and the defined other zinc salt. The Comparative Examples show that when the zinc borate and at least one other salt of zinc are both absent, as in Comparative Example 1, or when the zinc borate is present, but the at least one other salt of zinc is absent, as in Comparative Example 2, or when the zinc borate is absent, but another of zinc salt is present, as in Comparative Examples 3-5, substantially inferior results occur. In this respect, it will be appreciated that the Comparative Examples that have only one zinc salt do not have the same advantageous properties, particularly both excellent heat resistance and color stability in the reflow soldering step. The additional Comparative Example provided in the Declaration Under 37 C.F.R. §1.132 submitted with the response dated November 17, 2008, shows that a combination of zinc phosphate and calcium zinc molybdate (but which does not contain zinc borate) also provides inferior results, particularly with respect to the flammability evaluation and reflow resistant temperature.

In the Advisory Action, the Examiner has apparently contended that the claims must be restricted to the specific conditions set forth in the Examples. The Examiner's apparent standard is clearly incorrect as there is no decision which holds that the evidence must be identical to the claim language. From the illustrative and comparative examples of record, it is apparent that the only significant variable relates to the claimed combination of zinc borate and at least one other salt of zinc

which is specifically recited in the claims and specifically exemplified in the evidence of record. To further illustrate that it is not necessary to conform the claims with the examples, the Examiner's attention is directed to the decision in *In re Chupp*, 816 F2d 643, 2 USPQ2d 1437 (Fed. Cir. 1987). In that decision, the court found that the claimed compounds did not need to produce superior results in every environment in which the compound may be used in order to support the patentability of the compound. The court held that the claimed herbicide compound was patentable over next adjacent homolog despite showing of unexpected results on only two weeds and two crops. In so holding, the court relied in part on *In re Ackerman*, 444 F.2d 1172, 170 USPQ 340 (CCPA 1971) wherein tests only on polyester fibers using a claimed optical brightener (despite the disclosure that the brightener could be used on a variety of materials) was found sufficient to support the patentability of the brightener *per se*.

In view of the amendments to the claims, the evidence of record and the foregoing discussion, applicant respectfully submits that the amended claims are patentable over JP 2001-220441. The JP '441 publication relates to a combustion-resistant polyamide composition. As described in paragraph [0010], the composition includes (A) 20-80 wt% of aromatic polyamide with a melting point of 290°C or more, (B) 0-60 wt% of inorganic reinforcing material, (C) 5-40 wt% of bromine combustion-resisting agent, and (D) 0.1-10 wt% of one or more kinds of compounds selected from compound oxides containing zinc and zinc salts of phosphoric acid with the total amount being 100 wt%. The compound oxides containing zinc and zinc salts are set forth in paragraph [0038] and include a number of different compounds. In particular, the compounds include oxides of zinc combined with elements of Group

13 or 14 of the periodic table with boron, aluminum, gallium, thallium, carbon, silicon, germanium, tin and lead being specifically mentioned. This paragraph also mentions zinc salts of molybdate or tungstenate. While zinc borates are identified, the paragraph continues by stating that it is also possible to use zinc salts of molybdic acid or tungstic acid with calcium zinc molybdate, alkaline zinc molybdate and compounds of high-efficiency zinc molybdate and magnesium silicate being mentioned.

The Examples of the JP '411 publication only include a single zinc salt with Examples 1 and 3 only containing zinc borate and Examples 2 and 4 only containing zinc stannate.

The JP '441 publication does not describe every element of the claim, nor does render the claimed subject matter obvious. There is absolutely no teaching to use a combination of zinc borate and at least one other of the specifically defined salts of zinc as recited in amended claim 1 of the present application. Instead, the JP '441 publication teaches a variety of zinc compounds which can be used without any guidance that mixtures are important, much less mixtures of zinc borate and at least one other salt of zinc selected from zinc phosphate, zinc stannate and calcium zinc molybdate. It will be recognized that the illustrative examples of the JP '441 publication only use a single zinc salt and that the examples that use zinc borate alone are similar to **Comparative** Example 2 of the present application while the illustrative Examples of the JP '441 publication that use zinc stannate alone are similar to **Comparative** Example 4 of the present application. Both of these Comparative Examples provide inferior color stability relative to the illustrative Examples. It is also of significance that the JP '441 publication does not disclose or

suggest that improvements in color stability relative to zinc borate or zinc stannate alone can be attained in accordance with the present invention.

The evidence of record refutes any possible contention that the claims are obvious from the teachings of the JP '441 publication. The publication does not recognize that by using a combination of zinc borate and at least one other salt of zinc from the defined group in accordance with the present invention, one can obtain the advantageous properties illustrated in the evidence of record, including advantageous properties that are nowhere appreciated by the JP '441 publication.

With regard to the Examiner's statements on page 4 of the Advisory Action, applicant maintains that the Examiner's analysis is incorrect. One does not look at a list of possible compounds, deem the claimed combinations "obvious" without any motivation to do so and then take the position that the advantageous results are an inherent result of this combination. Instead, one appreciates that the JP '441 publication does not provide any teaching of which combinations should be used and does not provide any recognition that the results of certain combinations are superior to any compound alone. When one then considers the advantageous results which can be obtained relative to the closest prior art (i.e., the exemplified zinc stannate and zinc borate alone), as shown by the technical evidence of record (see Comparative Examples 2 and 4 of Table 1), such evidence successfully refutes any possible *prima facie* case of obviousness.

In view of the subject matter defined in the claims and the evidence that has been provided in the record, applicant respectfully maintains that the presently claimed invention is patentable over the cited prior art and therefore requests reconsideration and allowance of the present application.

Should the Examiner wish to discuss any aspect of the present application, she is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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